Mumbai University

[CBSGS – 75:25 Pattern]
(October – 2016)

PAPER - III

DATA

WAREHOUSING

Time: 2 ½ Hours　　　　　　　　　　　　　　　　　　　　　　　　　　**Total Marks:** 75

N.B.: **(1)** *All Question are Compulsory.*
　　　　(2) *Make Suitable Assumptions Wherever Necessary And State The Assumptions Made.*
　　　　(3) *Answer To The Same Question Must Be Written Together.*
　　　　(4) *Number To The Right Indicates Marks.*
　　　　(5) *Draw Neat Labeled Diagrams Wherever Necessary.*
　　　　(6) *Use of Non – Programmable Calculator is allowed.*

Q.1　ATTEMPT ANY TWO QUESTIONS: (10 MARKS)

(A) Explain Star Schema Model with example. **(5)**
(B) What is Source System? Briefly explain various layers in Data Warehouse Architecture. **(5)**
(C) Explain Functional Dependency of the data with example. **(5)**
(D) Describe various strategies by which organizations can get into Data Warehousing. **(5)**

Q.2　ATTEMPT ANY TWO QUESTIONS: (10 MARKS)

(A) Enumerate and explain the steps to import metadata from Oracle Data Source. **(5)**
(B) List major components of Oracle Warehouse Builder. Also describe its Architecture. **(5)**
(C) Describe the importance of OWBSYS Schema. **(5)**
(D) What are Data Objects? Explain various functions of Data Editor. **(5)**

Q.3　ATTEMPT ANY TWO QUESTIONS: (10 MARKS)

(A) Explain about Cube and Dimensions with example. **(5)**
(B) What are the various windows available in Data Object Editor? Briefly explain any two of them. **(5)**
(C) Explain the steps to create dimension using Dimension Wizard. **(5)**
(D) Define what is Slowly Changing Dimension? Explain type2 and type3 Slowly Changing Dimensions with an example of each. **(5)**

Q.4　ATTEMPT ANY TWO QUESTIONS: (10 MARKS)

(A) Explain staging and its advantages and disadvantages. **(5)**
(B) Explain Key Lookup Operator with example. **(5)**
(C) Explain the Pre-Post-Processing Operators. **(5)**
(D) What are the attribute groups present in Joiner Operator? Explain the steps to connect source tables to target using joiner operator. **(5)**

Q.5　ATTEMPT ANY TWO QUESTIONS: (10 MARKS)

(A) Which attributes are used in a cube to represent its dimensions? Also discuss the naming conventions used for these attributes. **(5)**
(B) What is the role of transformation operator in a mapping? Describe SUBSTR Transformation Function. **(5)**
(C) What are External Tables? Explain the steps to create an External Table. **(5)**
(D) Write short notes on Object Validation and Code Generation. **(5)**

Q.6　ATTEMPT ANY TWO QUESTIONS: (10 MARKS)

(A) Explain Data Density and Data Sparsity in Multidimensional Cube with example. **(5)**
(B) Briefly explain various Metadata Change Management features in OWB. **(5)**
(C) Discuss Multidimensional Online Analytical processing. **(5)**
(D) Explain the directions and matching strategies to synchronize a mapping operators with its Repository Operator. **(5)**

[TURN OVER]

Q.7 **ATTEMPT ANY THREE QUESTIONS: (15 MARKS)**

(A)	Briefly explain Granularity and Additivity of facts.	**(5)**
(B)	What is a Listener? Explain concisely the steps to configure a Listener.	**(5)**
(C)	Explain Surrogate Keys with an illustrative example.	**(5)**
(D)	Define Data Flow Operators. Explain the role of aggregators and filters in ETL Mapping.	**(5)**
(E)	Explain the step to define constant values through Constant Operator.	**(5)**
(F)	Explain Real-Time Analytical Processing.	**(5)**